

Appl. No. 10/775,116  
Amdt. Dated Apr. 13, 2006  
Reply to Office Action of Apr. 04, 2006

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended)

A vehicle speed controller, comprising:

~~a rotary input device~~ foot pedals for human operation capable of continuous rotary motion mounted to a vehicle being mechanically independent of means for propelling said vehicle;  
speed sensing means responsive to changes in the angular velocity of said rotary input device;

a power source carried by said vehicle;

a motor connected to said means for propelling said vehicle, said motor being mechanically independent of said rotary input device; and

a controller electrically connected to said speed sensing means, said power source, and said motor, said controller being operative to proportionally regulate power supplied from said power source to said motor only relative to the sensed speed of said rotary input device in a continuous range from zero power when said rotary input device is halted.

Claim 2 (cancelled)

Claim 3 (cancelled)

Claim 4 (original)

The speed controller of claim 1 wherein said vehicle is a land vehicle.

Claim 5 (original)

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The speed controller of claim 4 wherein said vehicle is wheeled.

Claim 6 (previously presented)

The speed controller of claim 5 wherein said motor mechanically drives one or more wheels.

Claim 7 (previously presented)

The speed controller of claim 6 wherein said motor comprises an electric motor.

Claim 8 (previously presented)

The speed controller of claim 7 wherein said speed sensing means is an electric generator mechanically driven by said rotary input means.

Claim 9 (currently amended)

The speed controller of claim 8 1 wherein said sensing means is operative to selectively provide substantial mechanical resistance to the rotation of said rotary input device for a given amount of power supplied to said motor.

Claim 10 (currently amended)

The speed controller of claim 8 further including electrical resistance means connected to the electrical output of ~~said~~ a generator.

Claim 11 (original)

The speed controller of claim 10 further described in that said electric resistance means is manually settable to provide variable amounts of mechanical resistance.

Claim 12 (previously presented)

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The speed controller of claim 1 wherein said power source is a battery.

Claim 13 (original)

The speed controller of claim 12 further including a circuit breaker to disconnect said power source.

Claim 14 (previously presented)

The speed controller of claim 1 further including means for selectively varying the proportional amount of electrical power increase to said motor relative to the increase in the sensed speed of the rotary input device.

Claim 15 (previously presented)

The speed controller of claim 1 wherein said rotary input device further includes a drive sprocket, idler sprocket, and a drive chain extending therebetween, said sprockets and chain being visually simulative of a bicycle chain drive.

Claim 16 (previously presented)

A vehicle having an electrical speed controller, comprising:

a vehicle;

a rotary input device capable of continuous rotary motion mounted to said vehicle for human operation;

sensing means incrementally responsive to the angular position of said rotary input device;

a power source carried by said vehicle;

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motor power output means for propelling said vehicle mechanically independent of said rotary input device;

a controller electrically connected to said sensing means, said power source, and said motor power output means; and

said controller being operative to provide power from said power source to said motor power output means so that the angular position of said motor output means proportional to the angular position of said rotary input device is maintained.

Claim 17 (original)

The vehicle speed controller of claim 1 further including a key switch which in the off position shorts out the output of the speed controller to disable it.

Claim 18 (previously presented)

The speed controller of claim 16 wherein said speed sensing means is a first rotary encoder.

Claim 19 (previously presented)

The vehicle speed controller of claim 18 further including a second encoder connected to said motor output means for determining its angular position of rotation.